DOCUMENT RESUME

ED 109 796 EA 007 384

AUTHOR Taylor, Patricia
TITLE Landscape Designs for Schools.
PUB DATE 75
NOTE 24p.

EDRS PRICE MF-$0.76 PLUS POSTAGE. HC Not Available from EDRS.
DESCRIPTORS *Annotated Bibliographies; *Campus Planning; Educational Facilities; Elementary Secondary Education; *Landscaping; Physical Education Facilities; *Playgrounds; Publications; Reference Materials; School Architecture

ABSTRACT

This annotated bibliography includes summaries of 15 books and articles dealing with the topic of school landscape design, as well as a brief introduction that comments on recent trends in the field. Most of the publications cited are fairly recent; about two-thirds of them were published after 1970. Annotations range from approximately 125 to 250 words in length. (JG)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Patricia Taylor
[75]

ED109796

LANDSCAPE DESIGNS FOR SCHOOLS

There was a child went forth every day
And the first object he looked upon, that object he became,
And that object became part of him for the day or a certain
part of the day,
Or for many years or stretching cycles of years.
The early lilacs became part of this child,
And grass, and red and white morning glories and white and red
clover . . .
And all the changes of city and country wherever he went . . .
They became part of that child who went forth every day,
And who now goes, and will always go forth everyday.

- Walt Whitman

Building budgets are often cut to a minimum to please penny-wise taxpayers. Among the first things to go are seemingly frivolous landscape designs. Professionally planned landscapes are tossed to the winds when budgets fail to pass. Wise administrators, knowing that the public places a low priority on roses around the fountain, should have alternative plans in mind.

The school, more and more, is becoming a community center for activities, inconsiderate of age or season. The modern public's needs for socialization, recreation, and adult learning programs place the school's facilities in great demand. With the public's eyes on the school building, it is to a district's credit to have a functional, aesthetically pleasing physical plant that is consistent with neighborhood needs and appearance.

Consistent with needs in curricular physical education, extra-curricular sporting events, and community recreation programs, athletic fields and playgrounds are primary in any land-

EA 007 384

PERMISSION TO REPRODUCE THIS [redacted] MATERIAL BY MICROFICHE ONLY HAS BEEN GRANTED BY
Patricia Taylor
TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE NATIONAL INSTITUTE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE [redacted] OWNER.

scape plan. With available information and standards for these recreation centers, many competent district maintenance staffs can plan and implement construction of traditional facilities. For more innovative projects, it is resourceful for the school to call on qualified landscape consultants.

There seems to have been little concern for the direction of school play areas in the American past. Urban and rural schools traditionally have paved areas with great expanses of asphalt or concrete, throw in a few jungle-gyms and erect a swing set or two. Contemporary concerns are that, having no knowledge of the soil, a child can lose touch with his roots. With a prototype developed in 1939 by Denmark, England and other European countries have introduced "adventure playgrounds" into school and park planning. Lady Allen of Hurtwood, an outspoken proponent of the playgound, has done extensive studies into its advantages. A reduction in destructive violence and socially unacceptable behavior seem to be the result of introduction of the "adventure playground", especially into urban neighborhoods. Landscape students from Berkeley, California have initiated the concept in the United States, at Thousand Oaks and Washington, both schools in the Bay Area. Recommendations seem to be to include the "adventure" area along with a traditional play facility.

Other landscaping alternatives tend toward the very functional use of space. They range from an architectually designed

forum-fountain for a new urban high school in Maryland to student-initiated environmental study areas. There have been many and successful attempts to cultivate and restore native plantings on school property by both elementary and high school classes. As well as lending a curious and attractive appearance to the total landscape scheme, these projects serve to heighten the students' understanding of their ecological environments.

Some of the landscape planning and implementation annotated on the following pages is radical indeed, such as at the Burris Laboratory School. Some ~~are~~ is very, very traditional. Although very little has recently been written on the subject, indicators are that educators and landscape architects are developing new and exciting ideas for use of school lands, including some very practical and aesthetic plans. Perhaps it is a blessing when successful school budgets fail to include allotments for formally landscaped gardens. It opens up stimulating possibilities for our school environments.

"We shape our schools and therefore they shape us, in our attitudes towards ourselves, towards others, and towards our environment." (Rosenman)

Hill, Chance S. Principles Governing the Landscape Development of Grounds for Educational Institutions (1949).

Mr. Hill wrote a short article, as a landscape specialist for schools, discussing the problems of designing for single building institutions as well as for multiple building sites.

For elementary schools he recommends a building site of 3-5 acres, where the development is not restricted by physical peculiarities. He makes further recommendations for the location of the building, outdoor passageways, play areas, and how to make the buildings and grounds a pleasing addition to the neighborhood.

For junior high schools, double the acreage is required, consistent with expanded athletic programs.

As well as 15-75 acres, Mr. Hill emphasizes the need for adequatly developed athletic facilities for the high school. He also stresses skillful location of buildings.

The main considerations in landscape design for schools, Hill says, are the following:

1. The type of design must be appropriate to the development under consideration;
2. Initial cost;
3. Maintenance; and
4. The technical training of the landscape designer.

Hill then goes into surface information on the following:

1. General Grading
2. Drainage
3. Irrigation
4. Roads and Walks
5. Walls and Steps
6. Lawns
7. Plantings
8. Maintenance

Taylor, James L. School Sites: Selection, Development, and Utilization, U.S. Department of Health, Education and Welfare (1958).

Taylor believes that good school grounds, well kept and efficiently utilized are an excellent means of public relations. He also believes that selection and development should be sensitive to, but not overwhelmed by, needs as expressed by the community. He breaks the outdoor environment into three main utilization possibilities:

1. Physical education and recreation:

   Elementary schools need some hard-surfaced play areas. Playground equipment should be varied and sufficient in quantity to avoid competition for use. Secondary schools need broad and varied facilities for this function.

2. Outdoor education:

   Taylor stresses the preservation of resources such as native trees and shrubs, natural streams, lakes, ponds, cultivated areas such as fields, gardents and orchards, native grass areas, guarries and other underlying evidences of soil features. In fact, he thinks that the availability of such resources should be a determining factor in site selection.

3. Fine arts presentations and graduation exercises:

   Beautified outdoor settings only enhance man-made art, thinks Taylor.

Taylor feels very strongly that the site development planning be a cooperative effort and that the planners be guided by a Landscape specialist.

Moore, Robin C. "Anarchy Zone : Encounters in a Schoolyard", Landscape Architect, Vol. 65, No. 5 (October, 1974) pp. 364-71.

The author begins by criticizing the asphalt jungle-schoolyards. He says that existing schoolyards can embody two alternatives:

1. negative survival in the sterile and aggressive asphalted atmosphere.
2. a creative situation where students are positive and responsive with each other and their surroundings.

He points out two schools which, in striving to achieve the second alternative, have followed the model of the European "adventure playground".

A. Thousand Oaks: In 1970, a K-3 school in Berkely was the recipient of a high energy, short term project to improve the playground area of the school. A teacher-parent group and University of California design students planned and implemented towers, planters, sitting areas and a pond.

B. Washington Environmental Yard: The school, the community, and the University combined efforts to "rip up asphalt and plant flowers". Their goal was to have the physical environment reflect an evolving set of environmental values.

Traditional structures such as swings, rings, and monkeybars were also included in both playground schemes. The concept that

was "busted", however, was that students need large areas in which to run. Through followup studies, it was shown that students much prefer living materials to pavement. They have found whole worlds living within clumps of bamboo, willow, and eucalyptus. They had the advantage of finding small wildlife organism close-up.

Needless to say, the yards and schools becaome places to hang out "after school".

Rosenman, Marvin Eli Let's Have Inside-Out Schools (Chicago: Educational Facilities Laboratories Incorporated, (1972).

Rosenman was involved in a design feasability study for the renovation and addition to the Burris Laboratory School in Muncie, Indiana. The study was made possible through the efforts of the Teachers' College and the College of Architecture and Planning at Ball State University.

The rationale behind the study is a belief that learning can be everywhere. The building was designed for the use of its exterior as well as interior forms, to involve the total community. The involvement should consist of the interaction of:

1. the human and cultural
2. the natural, and
3. man-made elements.

The building was designed as a veritable greenhouse for plants and people. Plexiglass, clear and tinted, was use extensively for acoustics and for natural lighting of circulation spaces (hallways), arcades, and the library/information center. The glass is also used to provide visual continuity with the garden/playcourts.

Plexiglass roofing covers compact corridors, filled with vegetation, bean bag chairs, and low, informal lockers. A plexiglass-domed play-bowl provides a large economical space for carnivals and all-season recreation.

Garden playcourts provide safe, visually and physically contained space, suitable for observation from surrounding

indoor areas. They also serve as outdoor stages and forums in good weather.

The site is developed with a variety of landscape ideas, including parks, ponds, a public piazza, and the play-bowl.

Unknown "Ecological Basis for Planning a New Campus" Landscape Architect, Vol. 60 No. 5 (October , 1969) pp. 37-40.

In a study conducted by Neil Porterfied, the new University of Wisconsin campus is considered for an ecological laboratory. Plans were made for campus to build on existing conditions rather than to impose a predetermined design on the landscape. The objective was to leave native spaces for study by students and faculty.

An advantage projected would be that a landscape planned in accordance with and maintained by, practices simulating nature's own processes would reduce maintenance. He contrast this with the costly horticultural treatment of landscapes, requiring mowing, fertilizing and pruning of non-native species.

He explored factors which influenced:

1. Distribution and spatial relationships of plant communities;
2. Composition of plant communities and percentage of presence of the species;
3. Stability and succession; and
4. Establishment and maintenance of plant communities.

He classified two land use categories:

A. Active land use: Certain activities, such as athletics, restrict the use of certain native species.

B. Passive land use: Some areas require no restrictions on the use of native plant species.

He stresses that a detailed management program be developed to insure the proper maintenance of the plant communities.

Allen, Lady of Hurtwood Planning for Play (Cambridge: The M.I.T. Press, 1969).

Her book is an attack on the adult concept of what playgrounds should be. She believe in full participation of children in playground development and use, and sees it as an aspect of the world wide demand, by young people for their right to take part in the decisions that affect them, for example: education, housing, jobs and civil rights. She states, "We have to decide whether we are to make playgrounds for children or playgrounds for the grownups."

She emphasizes the need for a percentage of land for playgrounds in new housing construction. She supports it with numberous surveys, made in a dozen difference countries, relating remoteness from play sites to increase in the incidence of mental disorders in children.

She places great emphasis on "adventure playgrounds" in which there are opportunities for maximum child participation. She feels that the child's access to incidental and invented playthings is more important than whole areas of elaborately designed facilities to fulfill a child's single desire for play. She sites a study of an enormous and expensive "castle" playground which goes to great disuse, while children a block away clamor to enter a "junkyard" playground. The book is one of very few recently written about play areas for children.

Cooper, Clare C. "Adventure Playgrounds" Landscape Architect, Vol. 60 No. 8 (January, 1970) pp. 119-21.

The author begins with the premise that children's treasured memories rarely revolve around schoolyards or parks or other formal spaces provided for play, but around places that were wild, overgrown, mysterious, and hidden from adult eyes. She thinks that with the creeping payment in and around our cities, that children be given "a chance to be reunited with the lost landscape of spontaneity". She discusses at length, the development of the adventure playground concept in European countries, and their recent life under the California sun. The merits she claims for the playground are as follows:

1. It enables many things to go on within a small space.
2. Greater numbers of children are accomodated in that space.
3. A space where children can build and destroy in freedom from adult interference would be an attractive feature for children from the street. Those children who formerly vandalized for an outlet of their creative/destructive urge can now legitimize their urges.
4. Neighbors can work together to build and/or contribute to a nutually beneficial program.

She states that in addition, capital costs are low, supervision of the playground would create jobs, and it is an ideal temporary use of land.

Unknown "Forum Fountain for Dunbar Hight School" Progressive Architecture, Vol. 14 No. 1 (January, 1973) p. 105.

In Dunbar, Maryland, project archtects recently received a citation for a forum-fountain design. The outdoor space was created to bridge the newly created gap between two existing schools and a new high school. The schools are located in a black inner-city commu ty.

The architects were asked to design a work which members of the community could use, look at, and personally experience, regardless of their age. The work would function year-round and could be maintained without undue expense.

The solution was to design a strong focus for outdoor space and a practical human interaction. The fountain serves as a pulpit, podium, and plaything.

Areas around the central element allow for playing, sitting, and observing. The water and its surroundings have a humanizing effect on the school environment.

Schulz, Wally E. "You and Me in an Outdoor Lab" Instructor, Vol. 82 No. 8 (April, 1973) pp. 48-51.

This collection of articles submitted by teachers shows how little money and some effort can create or recreate a natural school environment for the study of ecological systems. The projects undertaken by these teachers and their students seem to be of three characters:

1. The space is provided within the school structure for students to landscape and to study the native plants and small animal life. This is carefully cultivated and cared for by the students. An example of this type of project is the arboretum in the grade school in Fontana, Wisconsin.
2. The restoration of adjacent acreage takes place for the purpose of encouraging the natural appreciation and fascination that young people have for nature. The project described here was initiated more for aesthetics than science. The entire school assume the responsibility of clean-up of a junk depository.
3. A clean up and restoration of community property for use of students and adults interested in pursuing the study of the environment took place in Pennsylvania. The project was considerably more sophisticated than those previously described. Initiated by community adults, there was more man-power and financial backing for the sixty-acre site.

The article provides a good look at alternatives to expensive landscaping and maintenance, while providing the school with valuable and enriching learning situations for students.

Shugrue, Sylvia K. "No Space for Soil" Science and Children, Vol. 9 No. 5 (January/February, 1972) pp. 30-31.

Thaddeus Steven Elementary School in downtown Washington, D.C. is surrounded by paving material: concrete, asphalt, and bricks. At the outset of this project, there was no space for soil. In a study unit initiated and co-ordinated by Sylvia Shugrue (science teacher) and local landscape architects, and the District of Columbia Office of Beautification, students in all grades developed small spots of greenery and beauty in this black-urban school. As well as permanent plantings such as evergreens and shrubbery, students introduced food and flower crops, from petunias to pumpkins.

The students had to fight drought, insensitive motorists, and litter. Many community-minded citizens, becoming aware of the project, gave both financial and moral support. Businesses and individuals donated materials. Mayor Walter Washington awarded them a Certificate of Merit.

Passantino, Erika D. "Adventure Playgrounds for Learning and Socialization" Phi Delta Kappan, Vol. 41 No. 5 (January, 1975) pp. 329-333.

Ms. Passantino first of all investigated the nature of play:

1. Games of movement involve individual play, development of the large muscles, growth of courage and sensory experiences.
2. Games of interaction promote communication with the environment, social awareness, and accepting and following rules.
3. Games of creativity and manipulation encourage artistic, constructive, and technical play, developing the form-giving impulses.

She says that the child moves through these stages during the growing process, eventually encompassing all of them. It is the belief of the author that all three elements must be supported and lived out in order to avoid physical and emotional impoverishment.

She believes that an adventure playground can fulfill all the requirements of a facility for full childhood development. Such a facility would be the core of a large play or learning complex. The plantings, basically would be of a practical nature: Willow, bamboo, and changeable flowers. The author believes that all of the following elements should be included in the landscape: fire, water, dirt, true challenge, success, respect, frustration and learning how to conquer it, and the ability to accept help.

All materials should be easily manipulatable. For artistic expression, graffitti walls, a pottery shop and a performing space should be included. Animals help teach responsibility. Scientific equipment allows technical proficiency. For socialization, "town meetins" should be called to establish rules of behavior.

The author ennumerates prototypes for adventure playgrounds, then goes on to propose that money used to replace or repair vandalized properties be channeled, instead, into wholesome physical and emotional growth of children through the adventure playground.

Robinson, Willard S. "Goldenrod: an Ecological Goldmine" Instructor, Vol. 8 No. 1 (August, 1974).

Mr. Robinson makes a real case for this hearty and persistent "weed". He denounces groundskeepers and their mowing machines. He says, in fact, that school grounds fortunate to have this glorious weed have an abundant resource at hand. The author suggests that the goldenrod patch be allowed to thrive for ecological study. As a student and teacher, he has had personal experience using it for ecological enrichment. The goldenrod can be used for study of pollination and reproduction; insect collection; the sudy of the insect community; flower arrangements; natural dye ingredients. Added to these utilizations are the advantages of goldenrod being:

1. Extremely common;
2. No cost to the taxpayer; and
3. A plethora of ecological principles.

Shugrue, Sylvia K. "An Urban ESA" Science and Children, Vol. 8 No. 5 (January/February, 1971) pp. 21-22.

Ms. Shugrue points out that teachers and students are becoming involved in the development and use of Enviornmental Study Areas. Madison School, an inner-city elementary school, was chosen as a site to afford students an introduction to environmental diversity.

The National Park Service promoted the program with a landscape design providing for five basic life-zones or eco-systems for severly eroded area of school property. The systems for study are:

1. grasslands
2. desert
3. semi-arid transitional area
4. croplands
5. forest.

The work by students and supervisors involved:

A. Examining soil samples

B. Surveying the existing site and identifying problems

C. Spreading new topsoil

D. Planting

E. Maintenance according to systems

As well as exposing the students to the reclamation of a barren site, the entire neighborhood became excited and interested in the project. They were responsible for the carry-over of the project into the summer.

Tonigan, Richard "Lawn Planting Made Easy" School Management, Vol. 15 No. 9 (September, 1971).

Faced with the problem of a slope that had "gone to seed" and a late planting schedule, maintenance director, Bub Breaky, of Seattle's Highline School District turned to a hydraulic seeding method in the fall of the year. In Seattle, known for it's heavy rainfall, erosion can be a determining factor in school landscaping. Mr. Breaky was confronted with an eye-sore left over after new construction had completed Chinook Jr. High. Knowning that it is the responsibility of schools to maintain and even upgrade neighborhoods, he turned to rather radical and expensive methods of dealing with the undesirable plot of ground facing community passersby.

Landscape contractors used a wood cellulose mulching material, made by Weyerhauser, along with fertilizer and grass seed from a large, hydraulic tank truck to plant the area. The grass germinated as planned and the result was a stablization of the sloping area and beautification of the neighborhood.

LANDSCAPE DESIGN FOR SCHOOLS

Bibliography

Allen, Lady of Hurtwood Planning for Play (Cambridge: The M.I.T. Press, 1969).

Cooper, Clare C. "Adventure Playgrounds" Landscape Architect, Vol. 60 No. 8 (January 1970) pp. 119-21.

Hill, Chance S. Principles Governing the Landscape Development of Grounds for Educational Institutions,(1949).

Moore, Robin C. "Anarchy Zone: Encounters in a Schoolyard: Landscape Architect, Vol. 65 No. 5 (October, 1974) pp. 364-71.

Passantino Erika D. "Adventure Playgrounds for Learning and Socialization" Phi Delta Kappan, Vol. 41 No. 5 (January, 1975) pp. 329-333.

Robinson, Willard S. "Goldenrod: An Ecological Goldmine" Instructor, Vol. 84 No. 1(August, 1974).

Rosenman, Marvin Eli Let's Have Inside-Out Schools (Chicago: Educational Facilities Laboratories, Incorporated, 1972).

Schulz, Wally E. "You and Me in an Outdoor Lab" Instructor, Vol. 82 No. 8 (April, 1973) pp. 48-51.

Scott, O.M. Campus and Athletic Fields (Marysville, Ohio: O.M. Scott and Sons Co. 1932).

Shugrue, Sylvia K. "An Urban ESA" Science and Children, Vol. 8 No. 5 (January/February, 1971) pp. 21-22.

Shugrue, Sylvia K. "No Space for Soil" Science and Children, Vol. 9 No. 5 (January/February, 1972) pp. 30-31.

Taylor, James L. School Sites: Selection, Development, and Utilization U.S. Department of Health, Education and Welfare (1958).

Tonigan, Richard "Lawn Planting Made Easy" School Management, Vol. 15 No. 9 (September, 1971).

Unknown "Ecological Basis for Planning a New Campus" Landscape Architect, Vol. 60 No. 5 (October, 1969) pp. 37-40.

Unknown "Forum Fountain for Dunbar High School" Progressive Architecture, Vol. 14, No. 1 (January, 1973) p. 105.